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# FISHERIES STATISTICS 1989



## Salmonid and Freshwater Fisheries Statistics for England and Wales

(Declared catches of salmon and migratory trout, by rod and by commercial instrument and inclusive of the available catch data for eels and freshwater fish).



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## NATIONAL RIVERS AUTHORITY

### SALMONID AND FRESHWATER FISHERIES STATISTICS FOR ENGLAND AND WALES, 1989

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Ministry of Agriculture, Fisheries and Food, Directorate of  
Fisheries, to the NRA. Data for 1983-1988 have been  
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(MAFF, Directorate of Fisheries Research)



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### **Fisheries aims**

- To maintain, improve and develop fisheries.

### **Fisheries objectives**

- To monitor the fishery status of rivers and inland, estuary and where appropriate, coastal waters
- To regulate, protect and conserve salmon, trout, freshwater, eel and coastal fisheries (where appropriate) through the enforcement of fisheries legislation
- To formulate policies to maintain, improve and develop fisheries and restore and rehabilitate damaged fisheries
- To ensure proper consideration of fisheries issues through Regional Fisheries Advisory Committees
- To provide a fisheries service which is based on a sound charging system and which is sensitive to the needs of the public.

CONTENTS		Page
1.	Introduction	7
2.	Changes in presentation of the data for 1989	7
3.	National scale reading programme	7
4.	Review of catches in 1989	7
4.1	Overview	8
4.2	Northumbria	8
4.3	Yorkshire	9
4.4	Anglian	9
4.5	Thames	9
4.6	Southern	10
4.7	Wessex	10
4.8	South West	10
4.9	Severn-Trent	11
4.10	Welsh	11
4.11	North West	12
5.	References	12
Table 1	National Rivers Authority annual statistics collection procedures for 1989 - commercial data	13
Table 2	National Rivers Authority annual statistics collection procedures for 1989 - rod data	14
Table 3	Number and value of commercial fishing licences issued - 1989 season	15
Table 4	Type, individual duty charged and number of rod licences issued - 1989 season	16
Table 5	Number and value of rod licences issued - 1989 season	17
Table 6	Number of licences issued and percentage return rate for rod fisheries - 1989 season	17
Table 7	Annual commercial close seasons and weekly close times for salmon and migratory trout - 1989 season	18
Table 8	Annual rod close seasons for salmon and migratory trout - 1989 season	19
Table 9	Monthly reported salmon and grilse catches by commercial instruments - 1989 season	20
Table 10	Monthly reported migratory trout catches by commercial instruments - 1989 season	21
Table 11	Monthly reported rod catches of salmon and grilse by principal rivers - 1989 season	22
Table 12	Monthly reported rod catches of migratory trout by principal rivers - 1989 season	23

Table 13	Estimated proportions of salmon and grilse in commercial and rod catches by region - 1989 season	24
Table 14	Catches of eels and freshwater fish taken in inland waters for human consumption - 1989 season (as compiled for EIFAC)	24
Table 15	Nominal catches of salmon in high-seas interception fisheries (tonnes round fresh weight), 1979-89	25
Table 16	Nominal catches of salmon and grilse in home-water fisheries (tonnes round fresh weight), 1979-89	25
Table 17	Summary of regional salmon and grilse commercial catches, 1984-89	26
Table 18	Summary of regional migratory trout commercial catches, 1984-89	26
Table 19	Summary of regional salmon and grilse rod catches, 1984-89	27
Table 20	Summary of regional migratory trout rod catches, 1984-89	27
Table 21	Salmon stocking - numbers of eggs, fry, parr and smolts released - 1989 season	28

## 1. INTRODUCTION

This report is the first on salmon and migratory trout catch statistics for England and Wales published by the National Rivers Authority (NRA). From 1989 onwards, these statistics will appear each year as NRA fisheries statistics reports replacing the Data Report Series which was published by the MAFF Directorate of Fisheries Research.

This is therefore an appropriate time to thank the staff at MAFF for their excellent work in having introduced rigour into the collection and collation of salmon and sea trout catch statistics and for having put the reporting onto a clear and sensible basis.

**It is important to remember that the catch data recorded in this document represent declared catches only and as such will not be an entirely accurate record of the total numbers of fish landed. Furthermore, the relationship between catch and stock size is difficult to establish regardless of the accuracy of the catch data. Great care must, therefore, be taken in using these figures to derive anything beyond a measure of catch.**

## 2. CHANGES IN PRESENTATION OF THE DATA FOR 1989

The 1989 data have been presented in a broadly similar format to those of 1988. However, this year's report also includes effort data for rod fisheries where it is available. These data are available in two regions of the NRA and combined with catch data are included in Tables 11 and 12 as catch per day. Effort data for commercial fisheries are available for five NRA regions in 1989, one more than in 1988. The data for the North West region have been calculated and reported as catch per licence-tide; whilst data for other regions are given as catch per licence-day. It is hoped that further effort data will be available in future years.

## 3. NATIONAL SCALE READING PROGRAMME

The results from the national scale reading programme appear in Table 13. As in 1988, scale samples were collected from a range of fisheries by both NRA personnel and fishermen and were then forwarded to MAFF. Most of the scale reading was undertaken by a single reader, Mr W D Riley, to ensure continuity both between and within years, and according to agreed ICES guidelines (Shearer, 1989). Data for the Severn-Trent region were supplied by the NRA. In 1989, scale samples were available from five NRA regions, although as in 1988, Yorkshire data were extrapolated from Northumbria data.

The methods employed for estimating the relative proportions of salmon and grilse in the regional catches were as used in 1987 (Russell and Buckley, 1989). The specific method of estimation is indicated for each NRA region and these are given in Table 13.

## 4. REVIEW OF CATCHES IN 1989

Catch statistics vary in accuracy from year to year, and catches themselves fluctuate because of a wide variety of influencing factors. All available information regarding these factors should be considered to avoid undue significance being attributed to changes in catch which may occur in any one year. Those factors likely to have affected catches during 1989 (together with the summarised data presented in Tables 17-20) were used to provide the following, more critical, review of the 1989 catch data in relation to those of recent years (1984-88).



#### 4.1 Overview

The overriding influence on catches of both salmon and sea trout in all areas during 1989 was the prolonged period of dry weather which resulted in exceptionally low river flows throughout the summer months. However, although catches by both rods and nets were depressed in many regions, above average catches were still recorded in some areas.

The declared salmon net catch in England and Wales in 1989 was 11% less than in 1988 and 12% below the average for the previous five years. However, while catches on the east and south coasts were well below the 5-year average, those from west coast areas were generally above average. The declared sea trout net catch was 20% above that recorded in 1988 and 19% above the 5-year average, but, in contrast to salmon, while west coast catches were below the average, east coast catches were good, with those in Northumbria being exceptional.

Declared rod catches of both salmon and sea trout were less than 50% of the particularly good catches recorded in 1988, and were both well below the 5-year average. Low flows persisted for much of the year in many regions and conditions for both upstream movement of fish and angling were generally unfavourable. Salmon rod licence sales were about 7% lower than in 1988, although fishing effort was undoubtedly further reduced in response to the prevailing conditions. Mortalities of adult salmon and sea trout were reported in many regions, largely as a result of high water temperatures and low levels of dissolved oxygen coinciding with events such as discharges of storm water or high spring tides. However, despite these problems elevated flows did occur late in the season and high densities of spawning fish were reported in many regions.

In many parts of England and Wales it was reported that the abnormally low flows greatly impaired salmon movements and delayed upstream migration of salmon to such an extent that spawning times were often delayed, or spawning occurred lower down catchments than normal. Subsequently, heavy winter rain brought exceptional spate conditions to many rivers and resulted in extensive erosion of river gravels and deposition of silt. Consequently, many salmon redds are known to have been lost either as a result of being washed out or by being clogged with silt. It is not known to what extent these problems will reduce recruitment, but it is feared that the impact could be considerable in some catchments. It is hoped that sampling of juvenile populations will indicate the extent of any such recruitment problems.

The proportions of grilse in the various regional net catches were estimated to have ranged between 51% for Wessex and 88% for the North West. For rods, the variation was estimated to be much greater, with only 9% grilse in Severn-Trent and 89% in the North West.

#### 4.2 Northumbria

The salmon net catch in the Northumbria fishery was less than 80% of both the 1988 catch and the 5-year average. By contrast, the sea trout catch was the best ever recorded. No changes in netting practices were reported for the year and the overall regional fishing effort (54 days per licence) was very similar to that in 1988 (53.8 days per licence). However, there was some local variation in effort with netsmen in the southern area fishing 3.5 days per licence more than in 1988 and those in the northern area 2 days less. Within the northern area there was a marked change in the relative effort expended on drift and T netting, with T nets increasing to 13.3 days per licence compared with 9.3 in 1988, and a corresponding decrease in the drift netting effort. This shift was thought to reflect the calmer sea conditions prevalent over the year and also the particularly high abundance of sea trout, which are more vulnerable to capture by T-net than drift net. Netsmen throughout the region continued to report persistent interference from seals.

The salmon catch per unit effort (CPUE) data for drift nets in 1989 were lower than those recorded in 1988, being reduced by almost 25% in the northern area and by 12% in the southern area. The CPUE for salmon caught by T-nets was, however, marginally higher (up 2.6%) on that for 1988. The CPUE for sea trout was higher for both drift and T-nets in 1989, with a particularly marked increase for the northern area drift nets from 1.39 fish per licence-day in 1988 to 3.11 in 1989.

Analysis of the scale samples for 1989 indicate that grilse comprised a similar proportion of the net catch (68%) as in 1988 (67%).

Declared rod catches of both salmon and sea trout were less than 60% of the particularly good catches of 1988, but remained well within the range of catches reported over the past 5 years. Low summer flows deterred fish entering the region's rivers until heavy rain towards the end of the season brought in larger numbers. Water quality problems exacerbated by high temperatures resulted in the deaths of a number of adult fish in the Tyne estuary. Rod licence sales continued to rise with 5% more licences sold in 1989 than 1988.

#### 4.3 Yorkshire

The net catches of both salmon and sea trout in the Yorkshire coastal fishery were slightly above those in 1988. However, while the salmon catch remained below the 5-year average (down 18%) the sea trout catch was above it (up 8%), although this latter increase was surprisingly small given the large increase observed in Northumbria. A minor change in the net licences issued in 1989 resulted in one fewer drift net and one more 'T & J' net operating. The total number of days fished by netsmen in the region (2905) rose by almost 6% on 1988 (2750). The CPUE for salmon was marginally lower overall in 1989 than in 1988, although while it decreased for drift nets from 4.71 to 4.12 fish per licence-day, it increased for the 'T or J' nets from 0.48 to 0.80. By contrast, the CPUE for sea trout was lower for 'T or J' nets in 1989 than in 1988, but higher for drift nets.

Grilse were estimated to have comprised 81% of the fish landed in the coastal fishery over the season.

Rod catches in Yorkshire were particularly poor in 1989. Rainfall in the region was reported to have been only 69% of the long-term average and river flows were very low. Both the salmon and sea trout catches were the lowest ever recorded for the region. The CPUE of salmon was estimated at 0.02 fish per day and that for sea trout was 0.14. Rod licence sales fell by 12% on 1988.

#### 4.4 Anglian

For the first time, netsmen in the Anglian region were required to submit catch returns. The data reveal that the coastal fishery off the Norfolk and Suffolk coasts exploits very few salmon, but does account for a reasonable number of sea trout. There are no rod fisheries for migratory salmonids within the region.

#### 4.5 Thames

The run of salmon into the Thames in 1989 was relatively poor. Low flows, high temperatures and low levels of dissolved oxygen combined to produce conditions in the lower river and estuary which were often critical for salmon survival. A total of 8 salmon were taken by anglers in 1989, 4 fewer than 1988.

#### 4.6 Southern

Net catches in the Southern area were substantially lower than in 1988. However, while adverse flow conditions may have been a factor, a major contribution to this decrease was a marked reduction in fishing effort. One licensee chose not to fish, and the seine net operated on the River Itchen at Woodmill Pool was only fished on 4 occasions. The CPUE for this fishery was 16.8 salmon and 32.3 sea trout per day. This represents a major reduction in the CPUE of salmon and a major increase in the CPUE of sea trout over that recorded in 1988. However, CPUE for both species is higher for this fishery than for any other fishery in England and Wales for which data are currently available.

As in other areas, rod catches in the Southern rivers were depressed by the prevailing drought conditions in 1989. The catch of salmon was 18% less than that in 1988 and 13% lower than the 5-year average. The difficulties of compiling accurate sea trout catch data for this region have been discussed in earlier reports and little significance is accorded to these data. However, catches were reported to have been markedly lower than in previous years. Despite the relatively poor catch of salmon, a large run of fish was reported late in the year resulting in large concentration of fish on the spawning grounds, reported to be the best for many years. However, subsequent high winter flows caused considerable damage to redds and a potential recruitment problem is anticipated.

#### 4.7 Wessex

The net catches of both salmon and sea trout in the Wessex area were well below those recorded in 1988 (down 19% and 28% respectively). This represented a decline of 29% on the 5-year average for salmon, with the catch in 1989 being the lowest recorded for the period. For sea trout the catch was only 16% less than the 5-year average and was well within the range for the period. Grilse were estimated to have comprised 51% of the net caught fish in the Wessex region.

Rod catches of both salmon and sea trout were particularly poor in 1989 being 64% and 27% of the 5 year average respectively. Low river flows, comparable to those in the drought year of 1976, were held to be responsible. Salmon rod licence sales fell by about 7% from 1988. A reduction in weed cutting was also thought to have adversely influenced rod catches during the year by hampering angling activities.

Two new fish passes were constructed on the Washford river in Somerset during 1989, with the intention of making this system accessible to sea trout.

#### 4.8 South West

The net catch of salmon in the South West was 9% less than that in 1988, but only 3% below the average of the past 5 years. Net catches of sea trout, however, declined to a far greater extent in 1989, being 41% less than the 5-year average. Although climatic conditions may have adversely influenced catches in 1989, netting effort was reduced significantly. The drift netmen on the River Camel were compensated by the NRA and did not fish. This was the first of a three year cessation of netting on the river as part of a salmon rehabilitation scheme following a major pollution incident in the system in 1988. A similar rehabilitation scheme continued to operate in the estuary of the Taw and Torridge, with 10 of the 14 seine netmen compensated not to fish and 2 of the others fishing for only part of the season. A further reduction in netting was also implemented in direct response to the prevailing low flow conditions, with netting prohibited on the rivers Tamar and Tavy during August; the netmen being compensated. For those systems in the South West unaffected by effort changes, net catches were actually higher in 1989 than in 1988, up 13.7% for salmon and 6.7% for sea trout. The overall fall in net catch would thus appear to be largely explained by the reduction in fishing effort; CPUE data are not available for the South-West region.

As in other regions, rod catches of salmon and sea trout in the South West were very low in 1989, being less than 60% of the 5 year averages. The low flow conditions were severe throughout the region and migration of fish into the rivers was greatly impaired. Mortalities of fish were recorded in the river Erme due to a pollution incident, and several hundred salmon were lost in the Tamar estuary as a result of the low flows, high temperatures and adverse environmental conditions. Salmon rod licence sales were about 15% lower than in 1988, so catches were also depressed by a decrease in fishing effort.

Enforcement activities were reported to have been particularly effective in protecting migratory salmonid stocks in the Camel and Tamar systems. In addition, continuing enforcement of the regulations governing the prohibition of fixed nets in inshore coastal areas was reported to be an effective deterrent against illegal fishing activities throughout the region.

#### 4.9 Severn-Trent

The catch of salmon by nets and fixed engines in the River Severn was 40% higher in 1989 than the average of the past 5 years, and was also the highest recorded catch over this period. An additional 4 ranks of putchers were licensed in 1989, increasing the total number of putchers from 4671 in 1988 to 5085 in 1989, an increase of about 9%. However, one less seine net was operated in 1989 (6 in total), and the number of lave net licences also fell from 59 to 52. Coloured fish with scale erosion were reported from the commercial fishery suggesting that fish were being delayed in the lower river and estuary for long periods. Slightly over half the fish (51%) caught in the fishery in 1989 were estimated to have been grilse.

The rod catch on the River Severn was relatively poor, 52% below that in 1988 and 38% less than the 5 year average. The season started well with some of the best spring salmon fishing for many years, but catches then dropped off as temperatures rose and water levels fell. The effects of the prolonged drought were alleviated to some degree by releases of water from Clwydog reservoir, but many fish were held up in the lower reaches throughout the summer. As a consequence, a number of adult salmon were killed when coinciding spring tides, storm water discharge and high temperatures created critical conditions in the Minsterworth area of the lower river. Heavy rains in October and November brought very large runs of fish into the river and concentrations of spawning fish were reported to be well above average. Grilse were estimated to have comprised only 9% of the rod caught fish in the River Severn in 1989.

In contrast to most other regions, salmon rod licence sales in the Severn-Trent region increased in 1989 over 1988; the increase was almost 14%.

#### 4.10 Welsh

Net catches of salmon and sea trout in the Welsh region in 1989 were very similar to those in 1988. However, while the sea trout catch was also similar to the 5 year average, the salmon catch was 15% above it. Fewer netting licences were issued in 1989 than 1988 although no quantifiable changes in overall fishing effort were reported. CPUE for salmon ranged from 0 to 6.14 fish per licence-day, the higher figure for the Usk putcher rank. For most fisheries in the region, however, the CPUE was less than 1 salmon per licence-day. For sea trout, CPUE ranged from 0 to 6.46 fish per licence-day, the latter for the Dyfi seine nets. Grilse were estimated to have contributed 67% of the salmon net catch in the region in 1989.

Rod catches of both salmon and sea trout were markedly lower than the good catches reported in 1988. The salmon catch fell by 66% (40% on the 5-year mean) and the sea trout catch by 57% (48% on the 5-year mean). As elsewhere, the low flow conditions were unsuitable both for upstream migration of fish and angling. As a result rod licence sales fell by 8% compared with 1988.

#### 4.11 North West

As in the Severn and parts of Wales and the South West, and in contrast to catches on the east and south coasts, net catches of salmon in the North West were higher than those in 1988. An increase of 29% was recorded, 31% above the 5-year mean. By contrast, sea trout net catches fell by 20% on both the preceding year and 5-year average. Little change occurred in fishing effort, although 1 additional fixed engine licence was issued for a crib on the River Eden. CPUE data, expressed as catch per licence-tide, were made available for the first time. These revealed that CPUE varied from 0.24 to 5.75 salmon per licence-tide, with the highest figures (4.21 and 5.75) relating to the drift nets in the Lune estuary and on the Cumbrian coast respectively. For sea trout, the CPUE ranged from 0.04 to 3.67 fish per licence-tide, the latter for the seine nets on the River Duddon. Grilse were estimated to have comprised 88% of the net catches, the highest proportion recorded in any of the regions for which age data were available.

The declared rod catch of salmon in the North West region in 1989 was 39% below the excellent catch in 1988, however, this was the only area in which the 1989 catch remained above the regional average of the past 5 years. Sea trout catches, however, were well below both the previous year's catch (down 44%) and the 5-year average (down 26%). As elsewhere, prolonged low flows delayed the movement of fish into freshwater and presented unfavourable conditions for angling. Sales of salmon rod licences fell by around 5%. The catch per rod-day ranged from 0.06 to 0.50 for salmon and 0.04 to 0.25 for sea trout. The highest CPUE for salmon was recorded on the River Ellen, and for sea trout on the Cumbrian Esk. The lowest CPUE for both species was recorded on the River Wyre.

In common with certain other areas, spawning was reported to have been delayed by around 3 weeks over 'normal' years due to the low flows. Subsequent severe winter spates then occurred, and many redds were washed out and damaged. A potential recruitment problem is anticipated for some river systems in 1990.

#### 5. REFERENCES

- ANON., 1990. Report of the Working Group on North Atlantic Salmon, Copenhagen, 15-22 March 1990. ICES C.M. 1990/Assess:11, 133 pp.
- EUROPEAN INLAND FISHERIES ADVISORY COMMISSION, 1990. National reports of EIFAC member countries for the period January 1989-December 1990. EIFAC Occasional Paper. Food and Agriculture Organisation of the United Nations, Rome, (in press).
- RUSSELL, I.C. and BUCKLEY, A., 1989. Salmonid and freshwater fisheries statistics for England and Wales, 1987. Fish. Res. Data Rep., MAFF Direct. Fish. Res., Lowestoft, (16): 27 pp.
- SHEARER, W.M., 1989. Report of the Second Atlantic Salmon Scale Reading Workshop, Aberdeen, Scotland, 12-14 October 1988. ICES C.M. 1989/M:7, 52 pp. (mimeo).

Key:

- (a) Salmon only.
- (b) Only 6 commercial licensees. Data collected by letter.
- (c) Numbers of fish recorded for 3 weight categories, <7, 7-15, >15lbs.
- (d) Effort data in 1989 collected only for the R. Itchen.
- (e) Numbers of fish recorded in 1lb weight groups up to 20lbs. Large fish entered individually.

\* Represents a change from that reported in 1988.

Table 2 National Rivers Authority annual statistics collection procedures for 1989 - rod data.

NRA Region	One form for salmon and sea trout	Return form part of licence	Return pre-paid	Return required	No. reminders issued	Catch data required from licensees						
						Daily record of nos. caught	Individual weights of fish	Exact date of capture	River or place of capture	Method of capture (e.g. bait)	Effort data (e.g. days fished)	Separate reporting of salmon and grise
Northumbria	Yes	Yes	No	30 Nov	0	No (monthly totals)	Yes	No (monthly totals)	Yes	No	No	No
Yorkshire	Yes	Yes*(a)	No	15 Nov	2	No (monthly totals)	Yes	No (monthly totals)	Yes	No	No	Yes (± 7lbs)
Anglian	----- No rod fisheries for salmon or migratory trout -----											
Thames	Negligible catches - No return forms used			30 Nov	0	Yes	Yes	Yes	Yes	No	No	No
Southern	No (b)	No (c)	No	30 Nov	0	No	No	No	Yes	No	No	No
						----- Monthly totals ----- (But full details for sea trout)						
Wessex	No (b)	Yes	No	15 Nov	2	No	No	No	Yes	No	No	Yes (± 8lbs)
						----- Monthly totals -----						
South West	Yes	Yes (d)	Yes	14 days after expiry of licence	0	Yes	Yes	Yes	Yes	No	No	No
Severn-Trent	Yes	No	Yes	31 Oct	1 or 2	Yes	Yes	Yes	Yes	No	No	No
Welsh	Yes	Yes	Yes	7 days after expiry of licence	1 or 2	Yes	Yes	Yes	Yes	Yes	Yes	No
North West	Yes	No	Yes	30 Nov	0 (e)	Yes	Yes	Yes	Yes	No	Yes	No

Key:

(a) River Esk (Special licence) has separate return form supplied with licence. Otherwise, return form part of licence.

(b) Sea trout can be fished for under either salmon or trout licences.

(c) Return form is part of licence only for sea trout caught under trout licences. Salmon data collected by individual letters not return forms.

(d) Licence stuck onto return card.

(e) No record maintained of licensees and so issuing of reminders impossible.

\* Represents a change from that reported in 1988.

**Table 3 Number and value of commercial fishing licences issued - 1989 season.**

NRA Region	Salmon and Migratory Trout					Eel		
	Fishing Method	Number (a)	Duty (£)	Number Endorsees	Value (£) (b)	Method	Number (a)	Value (£)
Northumbria	Coastal (N) drift or T nets	75	550.00	171	41284.20	Fyke nets/ Baited traps	70	280.00
	Coastal (S) drift nets	46	550.00	109	25321.80			
	Total	121		280	66606.00			
Yorkshire	Coastal drift nets	23	500.00	49	11509.80	Fyke nets	195	780.00
	Coastal T or J nets	37	380.00	81	14076.20	Criggs (in strings) (10 pots per string)	29	116.00
	Total	60		130	25586.00	Total	224	896.00
Anglian	Coastal nets (various)	159	15.00	259	2437.00	Nets/Traps (Reg)	6	90.00
						Nets/Traps (Div)	773	5798.00
						Total	779	5888.00
Thames	Nil					Fyke nets	211	2110.00
						Traps	3	6.00
						Pair trawls	1	100.00
						Total	215	2216.00
Southern	Seine nets	4	1.00	0	4.00	Traps	53	0
	Seine net (c)	1	120.00	0	120.00			
	Seine net (Sea trout)	1	1.00	0	1.00			
	Total	6		0	125.00			
Wessex	Seine nets	7	111.00	14	779.80	Fyke nets	18	194.25
	Dip nets	15	35.80	12	539.40	Fixed traps	10	750.00
	Putcher ranks	2		0	214.80	Elver net	161	4025.00
	300 Putchers (units of 50)	(6)	35.80			Total	189	4969.25
	Total	24		26	1534.00			
South West	Seine nets (single river) (d)	88	95.00	420	8444.00	Fyke nets/Traps	23	0
	Seine nets (double river)	1	151.00	7	152.40			
	Fixed Engine (Weir) Avon	1	138.00	0	138.00			
	Fixed Engine (Trap) Lyn	1	151.00	5	152.00			
	Drift nets (Camel) (e)	(7)	-	-	-			
	Total	91		432	8886.40			
Severn-Trent (f)	Lave nets (half season)	25	19.00	0	475.00	Elver dip nets	569	5690.00
	Lave nets (full season)	27	38.00	0	1026.00	Elver dip nets (Concessionary)	52	104.00
	Seine nets	6	100.00	33	606.60	Gloucester eel nets	5	30.00
	Fixed Engine ranks	20		0	2820.00	Putcheons	13	78.00
	comprising:					(Up to 20 putcheons per licence)		
	5085 Putchers (units of 50)	(106)	25.00			Fyke nets (>4m)	7	42.00
	470m of leaders:					Fyke nets (2-4m)	80	320.00
	Leaders <90m	(3)	30.00			Fyke nets (<2m)	11	33.00
	additional 20m lengths	(10)	8.00			(up to 5 <2m nets per licence)		
	Total	78		33	4927.60	Total	737	6297.00
Welsh	Compass nets	6	38.00	6	229.20	Elver dip nets	305	2394.00
	Coracle nets	19	Var	44	4589.80	Baited traps	11	96.00
	Wade nets	14	Var	38	208.10	Fyke nets	58	209.00
	Seine nets	73	Var	221	18759.20			
	Drift nets	14	Var	27	4885.40			
	Trammel nets	4	365.00	2	1460.40			
	Lave nets	9	12.50	0	112.50			
	Putcher rank	1			1476.00			
	1800 Putchers (units of 50)	(36)	41.00	0				
	Fish trap-basket	1	41.00	5	42.00			
	Total	141		343	31762.60	Total	374	2699.00
North West	Haaf nets (Solway)	165	40.00	0	6600.00	Fyke nets	(259)	259.00
	Haaf net (Ellen)	1	40.00	0	40.00	Traps, Putcheons, Dip nets and Baskets	(205)	105.00
	Cribs (Eden)	3	189.00	0	567.00			
	Fishing Baulk (Esk)	1	210.00	4	210.80			
	Drift nets (Cumbria Coastal)	4	203.00	9	813.80			
	Drift nets (Ribble)	6	130.00	17	783.40			
	Haaf nets (Lune)	26	83.00	0	2158.00			
	Drift nets (Lune)	10	215.00	28	2155.60			
	Seine net (Lune)	1	186.00	7	187.40			
	Seine nets (Duddon)	3	178.00	14	536.80			
	Lave nets (Kent)	8	97.00	0	776.00			
	Lave nets (Leven)	6	80.00	0	480.00			
	Coops (Derwent) (g)	2		0				
	Total	236		79	15308.80	Total	36	364.00

Key: (a) Numbers represent the number of licensees, except for data in parentheses which represent numbers of licensed components on which duty is paid.  
(b) Value includes endorsee fees (£0.20 each).  
(c) This net operates under rights of ancient privilege and is charged according to the 5 year average catch.  
(d) Some licences not utilised throughout the season. Licensees on the rivers Taw & Torridge fished for only limited periods under the provisions of a rehabilitation scheme and, in 1989, netting effort was reduced on the rivers Tavy and Tamar in response to the prevailing drought conditions.  
(e) No drift nets operating during Camel rehabilitation scheme 1989-1991.  
(f) Salmon licence details are for R. Severn only. Eel licences apply to both Severn and Trent catchments.  
(g) Privileged fixed engines, not fished at the present time.



**Table 4 Type, individual duty charged and number of rod licences issued - 1989 season.**

NRA Region/ Species	Season Duty (£)	Con. Season Duty (£)	Short Term	No. Days (a)	Duty (£)	Con. Short Term Duty (£)	Day Duty (£)	Con. Day Duty (£)	Other Duty (£)
<b>Northumbria</b>									
Salmon+M.Trout	2021 41.25	659 20.60	480	14	13.00	-	318 6.00	-	1 750 (b)
Salmon+M.Trout	-	-	-	-	-	-	-	-	47 1.00 (c)
Trout	8521 10.00	4479 5.00	1299	14	3.80	-	18963 1.00	-	-
FW Fish	4122 3.80	3045 1.90	-	-	-	-	-	-	-
<b>Yorkshire</b>									
Salmon+M.Trout	65 44.00	35 22.00	24	7	17.60	4 8.80	47 8.80	15 4.40	-
Trout+FW Fish	67639 5.50	26263 2.75	7136	7	2.20	1791 1.10	-	-	1 1175 (b)
Trout+FW Fish	-	-	-	-	-	-	-	-	65 0.80 (c)
<b>Anglian</b>									
All species	119867 7.50	41032 2.50	68075	7	1.50	-	-	-	288 0.70 (c)
All species	-	-	-	-	-	-	-	-	6 Var (b)
<b>Thames</b>									
All Species	111729 7.50	84783 2.00 (d)	31310	15	2.00	-	-	-	86 Var (e)
All Species	-	-	-	-	-	-	-	-	23 Var (b)
<b>Southern</b>									
Salmon	11 35.00	-	-	-	-	-	2 6.00	-	9 175 (b)
M.Trout+Trout+FW	56546 6.00	25886 3.00	(e)	28	3.00	-	834 1.00	-	55 30.00 (b)
FW Fish	-	-	-	-	-	-	-	-	1 15.00 (b)
All species	-	-	-	-	-	-	-	-	42872 1.50 (f)
<b>Wessex</b>									
Salmon+M.Trout	296 28.00	169 12.50	131	7	4.50	24 2.00	-	-	9 Var (b)
Salmon+M.Trout (g)	96 28.75	18 13.25	-	-	-	-	-	-	-
M.Trout+Trout	4807 8.65	1616 4.10	4132	7	2.10	427 1.00	-	-	14 Var (b)
M.Trout+Trout (g)	1841 9.40	438 4.85	-	-	-	-	-	-	-
FW Fish	7583 6.70	4461 3.15	13195	7	1.65	2591 0.75	1384 1.00 (c)	-	4 Var (b)
FW Fish (g)	10408 7.45	2460 3.90	-	-	-	-	-	-	-
<b>South West</b>									
Salmon+M.Trout	1975 30.40	838 15.20	666	7	15.20	244 7.60	2365 3.90	309 2.00	2 Var (b)
Trout	1922 7.60	1631 3.80	1895	7	3.90	-	2183 1.70	693 0.90	18 Var (b)
FW Fish	4456 2.30	1729 1.20	4980	7	0.90	-	-	-	11 Var (b)
<b>Severn-Trent</b>									
Salmon (h)	982 32.65	758 6.55	83	28	13.05	-	(i) 6.55	-	-
Trout+FW Fish	190875 4.50	61890 0.90	29105	28	1.80	-	-	-	6303 0.90 (c)
Trout+FW Fish	-	-	-	-	-	-	-	-	813 1.00 (e)
<b>Welsh</b>									
Salmon+M.Trout	8994 31.00	3410 21.00	1899	14	14.00	200 1.50	2577 5.00	-	5423 1.00 (j)
Salmon+M.Trout	-	-	-	-	-	-	-	-	10 Var (b)
Trout	15659 9.00	8250 6.00	23838	14	2.00	-	-	-	-
FW Fish	8288 5.00	3667 3.00	-	-	-	-	-	-	1 1270 (b)
<b>North West</b>									
Salmon	2198 32.00	767 16.00	1492	7	7.75	-	-	-	2785 24.00 (k)
Salmon	-	-	-	-	-	-	-	-	696 12.00 (l)
Salmon	-	-	-	-	-	-	-	-	8 Var (b)
M.Trout	1342 13.00	395 6.50	578	7	3.25	-	-	-	-
Trout	29480 5.50	5816 2.75	10611	7	1.75	-	-	-	1 8.50 (c)
Trout	-	-	-	-	-	-	-	-	4 Var (b)
FW Fish	32937 4.50	6610 2.25	4404	7	1.25	-	-	-	93 Var (c)

**Key:**

- (a) Also applies to concessionary short term licences.
- (b) General licence. Various duties apply.
- (c) Block licences for 1 day and covering many anglers. Duty is per angler. A minimum total fee may apply.
- (d) Concessionary season includes OAP/disabled, junior and second rod.
- (e) Temporary one site licence. Duty is per angler.
- (f) Second rod.
- (g) Licences include a second rod for an additional fee of £0.75.
- (h) Salmon licences for R. Severn only. Trout & FW Fish licences permit salmon fishing in R. Trent.
- (i) Numbers included with concessionary season licences (same licence), but will approximate to 50.
- (j) Special junior licence (under 10 years old).
- (k) Part season licences, valid from 1st June.
- (l) Concessionary part season licences, valid from 1st June.

**Table 5 Number and value of rod licences issued - 1989 season.**

NRA Region	Salmon (a)		Migratory Trout (b)		Trout (b)		Freshwater Fish	
	Number	Value (£)	Number	Value (£)	Number	Value (£)	Number	Value (£)
Northumbria	3526		105887		33262	131504	7167	21449
Yorkshire	190		4567		102895			464296
Anglian	229268							1110607
Thames	227931							1075833
Southern	22	5497	126194					483880
Wessex	743	21882	(c)	(c)	13275	88438	42086	177781
South West	6399		94597		8342	32530	11176	16806
Severn-Trent	1823		38110		288986			973513
Welsh	22513		398122		47747	238107	11956	53711
North West	7946	170803	2315	21893	45912	198172	44044	169178
<p><b>Key:</b> (a) Possession of a salmon rod licence also authorises the holder to fish for migratory trout, trout, freshwater fish and eels.  (b) Possession of a migratory trout or trout rod licence also authorises the holder to fish for freshwater fish and eels.  (c) No separate licences are issued. Migratory trout are fished for under either a salmon or trout licence.</p> <p><b>Note:</b> Dashed lines indicate that the licence number and value apply to the range of species covered.</p>								

**Table 6 Number of licences issued and percentage return rate for rod fisheries - 1989 season.**

NRA Region/ Species	Season %		Con. %		Short %		Con. %		% Day		Con. %		% Other	
	Season	Return	Season	Return	Term	Return	Short	Return	Day	Return	Day	Return	Other	Return
Northumbria Salmon+M.Trout	2021	32	659	50	480	20	-	-	318	8	-	-	-	-
Yorkshire Salmon+M.Trout	65	91	35	100	24	80	4	100	47	77	15	100	-	-
Southern (a) Salmon	11	100	-	-	-	-	-	-	-	-	-	-	9	100(b)
Wessex (a) Salmon	-	-	-	-	-	-	-	-	-	-	-	-	9	100(b)
Salmon	-	-	-	-	-	-	-	-	-	-	-	-	734	80(c) *
South West Salmon+M.Trout	1975	45	838	56	666	47	244	50	2365	36	309	44	-	-
Severn-Trent Salmon	-	-	-	-	-	-	-	-	-	-	-	-	1823	85(c)
Welsh Salmon+M.Trout	8994	57	3410	59	4676	48 (d)	-	-	-	-	-	-	10	NA(b)
Salmon+M.Trout	-	-	-	-	-	-	-	-	-	-	-	-	5423	NA(e)
North West Salmon+M.Trout	-	-	-	-	-	-	-	-	-	-	-	-	10261	21(c)
<p><b>Key:</b> (a) In the Southern and Wessex areas migratory trout are fished for under both salmon and trout licences, and so return rates for migratory trout cannot be calculated, but will be lower than those for salmon.  (b) General licences.  (c) Applies to all licence categories, no further breakdown available.  (d) Includes short term, concessionary short term and day licences.  (e) Special junior licence (return not required).  NA Not applicable.  * Denotes estimate.</p> <p><b>Note:</b> Percentage return rate is calculated from: (number licence returns received/number licences sold) x100</p>														

**Table 7 Annual commercial close seasons and weekly close times for salmon and migratory trout - 1989 season.**

NRA Region	Area/Method	Salmon				Migratory trout (Where different)	
		Close Season		Weekly Close Time		Close Season	
		From	To	From	To	From	To
Northumbria		1.9	25.3 (a)	1800 Fri	0600 Mon		
Yorkshire	Drift net T or J net	1.9	31.1 * (a)	1800 Fri 2000 Fri (a)	0600 Mon 0600 Mon	1.9	28/29.2
Anglian		1.10	31.3	0600 Sun	2400 Mon		
Thames		No commercial netting					
Southern		1.8	14.2	0600 Sat	0600 Mon		
Wessex	Somerset	31.8	15.2	0600 Sat	0600 Mon		
	Avon+Stour	1.8	31.1 *	0600 Sat	0600 Mon (b)	1.8	14.4
	Frome (part only)	1.10	31.5 *	0600 Sat	0600 Mon (b)	1.8	31.5
	Other	1.8	31.3 *	0600 Sat	0600 Mon (b)	1.8	14.4
South West	Avon	16.9	14.4	0600 Sat	0600 Mon		
	Axe	20.8	31.3	1800 Fri	0600 Mon		
	Camel	1.9	1.3	0600 Sat	0600 Mon		
	Dart	17.8	14.3	0600 Sat	0600 Mon		
	Exe	17.8	15.4	0600 Sat	0600 Mon		
	Upper reach	17.8	13.2	0600 Sat	0600 Mon		
	Lower reach	1.9	1.3	0600 Sat	0600 Mon		
	Fowey	1.9	1.3	0600 Sat	0600 Mon		
	Tamar District	1.9	1.3	0600 Fri	0600 Mon (c)		
	Taw+Torridge R. Lyn	1.9	31.3	0600 Sat	0600 Mon		
	District	1.9	31.3	0600 Fri	0600 Mon		
	Teign	1.9	14.3	0600 Sat	0600 Mon		
Severn-Trent	Nets	1.9 *	1.2 *	1200 Sat	0600 Mon	9.8	5.2
	Putts+Putchers (d)	16.8	15.4	-	-		
Welsh	Clwyd	1.9	14.3	2400 Thur	2400 Sun		
	Dee	1.9	28/29.2	2400 Thur	2400 Sun		
	Tywi+Taf	1.9	28/29.2	0600 Sat	1200 Mon		
	Usk	1.9	1.3	0600 Sat	0600 Mon		
	Wye Nets	1.9	31.1	0600 Sat	0600 Mon		
	Fixed Engines (d)	1.9	31.1	-	-		
	Other Nets	1.9	31.3	0600 Sat	0600 Mon (e)		
	Fixed Engines (d)	16.8	15.4	-	-		
North West	Solway Firth	10.9	24.2 (f)	0600 Sat	2400 Sun		
	Eden	1.9	31.3 (f)	0600 Sat	0600 Mon		
	Ellen	1.9	31.3	0600 Thur	0600 Mon		
	Other	1.9	31.3	0600 Sat	0600 Mon		

Key:

- (a) From 1987 season, nightly close time (2000-0400) has also applied.
- (b) Additional weekly close time between 2100-0500 Wed, Thur, and Fri applies.
- (c) Weekly close times vary: 1.3-31.5 0600 Fri to 0600 Mon, 1.6-31.8 0600 Sat to 0600 Mon.
- (d) No weekly close time for Fixed Engines.
- (e) With the exception of weekly close times for Teifi, Nevein, E. and W. Cleddau which are as for Tywi + Taf.
- (f) Close seasons changed by new byelaws which came into effect on 29 March 1988.

\* Migratory trout close seasons are as for those of salmon except where indicated by an asterisk. Variations are given in the right-hand column. Weekly close times are the same for both species.

Notes: Close seasons and weekly close times are subject to local variations; the exact dates are determined by byelaws so that an individual river's spawning time can be taken into account.  
Some waters may not be open for the full duration of the season.

**Table 8 Annual rod close seasons for salmon and migratory trout - 1989 season.**

NRA Region	Area	Salmon		Migratory trout	
		Close Season		Close Season	
		From	To	From	To
Northumbria		1.11	31.1	1.11	2.4
Yorkshire		1.11	5.4	1.11	5.4
Anglian		29.9	28/29.2	29.9	28/29.2
Thames		1.10	31.3	1.10	31.3
Southern		3.10	16.1	1.11	31.4
Wessex	Frome (part only)+Piddle	1.10	28/29.2	1.11	14.4
	Other	1.10	31.1	1.11	14.4
South West	Avon	1.12	14.4 (a)	1.10	14.4 (a)
	R. Avon District	1.11	14.3	1.10	14.3
	Axe	1.11	14.3	1.11	14.4
	Camel	16.12	31.3	1.10	31.3
	Dart	1.10	31.1 (a)	1.10	14.3
	Exe	1.10	13.2	1.10	14.3
	Fowey	16.12	31.3	1.10	31.3
	Tamar+Plym	16.12	31.3	1.10	2.3
	R. Plym	16.12	31.3 (a)	1.10	2.3
	R. Yealm District	15.10	28/29.2	1.10	2.3
	Taw+Torridge	1.11	31.1	1.10	14.3
	R. Lyn District	1.10	28/29.2 (a)	1.10	14.3
	Teign	1.10	31.1 (a)	13.10	14.3
Severn-Trent		1.10	1.2	1.10	15.3
Welsh	Dee+Usk	18.10	25.1	18.10	19.3
	Wye Upper reach+Tributaries	26.10	25.1	18.10	19.3
	Lower reach	18.10	25.1	18.10	19.3
	Other	18.10	19.3	18.10	19.3
North West	Eden	15.10	14.1	16.10	30.4
	Other (b)	1.11	31.1	16.10	30.4
<p>Key: (a) Experimental change in season.  (b) Migratory trout close season differs for rivers Annas, Bleng, Esk, Mite, Irt, Calder and Ehen for which 1.11 to 30.4 applies.</p> <p>Notes: Close seasons and weekly close times are subject to local variations; the exact dates are determined by byelaws so that an individual river's spawning time can taken into consideration.  Some waters may not be open for the full duration of the season.</p> <p>No changes have been reported since the 1988 season.</p>					

**Table 9 Monthly reported salmon and grilse catches by commercial instruments - 1989 season.**

NRA Region	River/Fishery	Fishing Method	No. Lic.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Un-Known	Total Number	Total Weight (Kg)	Av. day/ lic.	Catch/ Lic. day
Northumbria	Coastal (N)	Drift nets	75 (a)	-	34	203	826	2320	8892	6826	-	0	19101	70441	39.8	6.39
	Coastal (S)	T nets	75	-	10	19	365	547	2190	710	-	0	3841	13325	13.3	3.84
	Coastal (S)	Drift nets	46	-	0	34	361	824	6859	4149	-	0	12227	40676	55.4	4.80
	Whole area	Total	121	-	44	256	1552	3691	17941	11685	-	0	35169	124442	54.0	5.38
Yorkshire	Coastal	Drift nets	23	0	1	16	84	459	3171	1177	-	0	4908	15350	51.8	4.12
	Coastal	T or J nets	37	0	0	0	21	190	901	264	-	0	1376	4090	46.3	0.80
	Whole area	Total	60	0	1	16	105	649	4072	1441	-	0	6284	19440	48.4	2.16
Anglian	Coastal	Nets	159 (b)	-	-	2	0	2	0	0	0	0	4	18	-	-
Southern	Itchen	Seine net (private)	1	0	0	1	0	0	66	-	-	0	67	200	4.0	18.8
	Hants area	Seine nets (public)	5	0	0	3	7	6	0	-	-	0	16	37 (c)	-	-
	Whole area	Total	6	0	0	4	7	6	66	-	-	0	83	237	-	-
Wessex	Avon + Stour	Seine nets	8	0	0	0	7	128	202	-	-	0	337	1295	-	-
	Poole Harbour	Seine net	1	-	-	2	4	27	45	0	0	0	78	268	-	-
	Parrett	Dip nets	15	0	0	0	12	40	43	11	-	0	106	409	-	-
	Parrett	Purchar ranks	2	0	0	0	0	0	0	0	-	72	72	292	-	-
	Parrett	River total	17	0	0	0	12	40	43	11	-	72	178	701	-	-
	Whole area	Total	24	0	0	2	23	195	290	11	0	72	593	2264	-	-
South West	Exe	Seine nets	19	3	11	84	230	639	1470	607	-	0	3044	8236	-	-
	Taig	Seine nets	10	-	0	4	206	253	740	730	-	0	1933	5791	-	-
	Dart	Seine nets	18	-	2	16	202	315	779	690	-	0	2004	6427	-	-
	Avon	Fixed Engine	1 (d)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Tavy	Seine nets	4 (e)	-	0	2	11	37	58	0	-	0	108	395	-	-
	Tamar	Seine nets	14 (e)	-	15	29	171	371	784	0	-	0	1370	4814	-	-
	Tavy/Tamar	Seine net	1 (f)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Lynher	Seine nets	5	-	1	4	24	49	88	141	-	0	307	950	-	-
	Fowey	Seine nets	4	-	1	1	10	14	101	83	-	0	210	573	-	-
	Taw/Torridge	Seine nets	14 (g)	-	-	41	79	210	233	347	-	0	910	2937	-	-
	Lyn	Fixed Engine	1	-	-	0	16	57	58	74	-	0	205	510	-	-
	Whole area	Total	91	3	30	181	949	1945	4311	2672	-	0	10091	30433	-	-
Severn-Trent	Severn	Seine nets	6	0	0	0	24	137	175	166	-	0	502	1655	-	-
	Severn	Lave nets	52 (h)	6	7	24	107	238	305	353	-	0	1040	5093	-	-
	Severn	Fixed Engines	20	-	-	54	637	642	942	547	-	0	2822	10531	-	-
	Whole area	Total	78	6	7	78	768	1017	1422	1066	-	0	4364	17279	-	-
Welsh	Wye	Lave nets	9 (i)	0	0	0	0	0	0	0	-	0	0	0	-	-
	Usk	Drift nets	8	0	15	84	278	426	554	536	-	0	1893	8427	89.9	2.63
	Usk	Purchar rank	1	0	0	20	96	195	116	107	-	0	534	2439	87.0	8.14
	Usk	River total	9	0	15	104	374	621	670	643	-	0	2427	10866	-	3.01
	Tywi	Seine nets	8	0	0	46	7	16	52	96	-	0	217	697	63.4	0.43
	Tywi	Coracle nets	10	0	0	2	5	9	17	24	-	0	57	249	55.1	0.10
	Tywi	River total	18	0	0	48	12	25	69	120	-	0	274	946	-	0.28
	Taf	Wade net	1	0	0	0	0	0	0	0	-	0	0	0	37.0	0
	Taf	Coracle net	1	0	0	0	0	0	0	0	-	0	0	0	37.0	0
	Taf	River total	2	0	0	0	0	0	0	0	-	0	0	0	-	-
	S.W.Coastal	Wade nets	13	0	0	0	6	0	0	1	-	0	7	8	5.5	0.10
	S.W.Coastal	Seine nets	7	0	0	0	4	10	0	2	-	0	16	31	8.6	0.27
	S.W.Coastal	Fishery total	20	0	0	0	10	10	0	3	-	0	23	39	-	0.17
	E.W.Cleddau	Compass nets	6	0	0	0	1	2	9	40	-	0	52	136	23.8	0.36
	Neurom	Seine net	1	0	0	0	0	1	13	0	-	0	14	52	9.0	1.56
	Taf	Seine net	4	0	0	0	5	28	31	16	-	0	80	285	49.5	0.40
	Taf	Coracle nets	8	0	0	0	7	9	16	16	-	0	48	169	44.5	0.13
	Taf	River total	12	0	0	0	12	37	47	32	-	0	128	454	-	0.23
	Dyfi	Seine nets	6	0	0	0	4	27	57	64	-	0	152	603	44.8	0.57
	Dysynni	Seine nets	2	0	0	0	0	19	5	9	-	0	33	99	22.0	0.75
	Mawddach	Seine nets	2	0	0	0	2	14	7	14	-	0	37	120	38.5	0.48
	Glaslyn	Seine net	2	0	0	0	17	17	1	0	-	0	35	102	50.5	0.35
	Dwyfawr	Seine nets	2	0	0	0	0	5	45	55	-	0	105	426	27.5	1.91
	S.Ceern	Seine net	1	0	0	0	0	0	0	0	-	0	0	0	0	0
	Seiont	Seine nets	4	0	0	0	1	17	32	124	-	0	174	552	39.8	1.09
	N.Anglessey	Seine nets	2	0	0	0	0	0	0	0	-	0	0	0	6.5	0
	Ogwen	Seine nets	2	0	0	0	1	9	38	69	-	0	117	440	55.0	1.06
	Conwy	Fish trap	1	0	0	0	0	0	0	0	-	0	0	0	-	-
	Conwy	Seine nets	6	0	0	0	3	26	73	84	-	0	186	694	41.8	0.74
	Conwy	River total	7	0	0	0	3	26	73	84	-	0	186	694	-	-
	Chwyd	Drift nets	6	0	0	0	2	7	42	38	-	0	89	263	37.3	0.40
	Dee	Trammel nets	4	0	0	0	3	35	73	270	-	0	381	1481	41.0	2.32
	Dee	Seine nets	24	0	1	5	21	80	178	546	-	0	831	2850	57.0	0.61
	Dee	River total	28	0	1	5	24	115	251	816	-	0	1212	4331	-	0.79
	Whole area	Total	141	0	16	157	463	952	1359	2111	-	0	5058	20123	42.5	0.90
North West	Ribble	Drift nets	6	-	-	0	9	78	181	254	-	0	502	2452	92.7 (j)	0.90
	Lune	Haaf nets	26	-	-	0	7	82	480	609	-	0	1158	3900	49.2	0.91
	Lune	Drift nets	10	-	-	0	3	55	641	1585	-	0	2284	7699	54.2	4.21
	Lune	Seine net	1	-	-	0	1	1	41	19	-	0	62	148	-	-
	Lune	River total	37	-	-	0	11	118	1182	2213	-	0	3504	11747	-	-
	Kent	Lave nets	8	-	-	0	0	29	143	185	-	0	357	1151	29.8	1.51
	Leven	Lave nets	6	-	-	0	5	7	60	23	-	0	95	296	19.8	0.80
	Duddon	Seine nets	3	-	-	0	0	3	15	3	-	0	21	88	17.0	0.41
	S&W Cumbria	Area Total	4 (k)	-	-	0	0	2	8	18	-	0	28	78	58.0	0.24
	Coastal	Drift nets	4	-	-	0	0	11	341	464	-	0	816	2520	35.5	5.75
	Eden + Esk	Haaf nets	165	-	-	-	-	-	-	-	-	-	-	-	34.8	-
	Eden + Esk	Oriba	3	-	-	-	-	-	-	-	-	-	-	-	3.7	-
	Eden + Esk	River Total	168	-	0	8	36	209	819	766	135	0	1971	6743	34.3	0.34
	Whole area	Total	238	-	0	8	61	457	2709	3926	135	0	7294	25074	37.8	0.82
England and Wales													68940	239310		

Key: (a) Northern area licences are for both drift and T nets. Not all licensees use T nets.  
(b) 95% return only.  
(c) Weights are believed to be inaccurately reported.  
(d) Licence purchased by SWWA but was not used.  
(e) As part of the remedial measures taken during the 1989 drought, Tamar and Tavy netmen paid not to fish during August.  
(f) Catches included under Tavy and Tamar as appropriate.  
(g) Taw/Torridge rehabilitation scheme - reduction of netting effort. 10 nets not operated after April, 2 others operated only April to June.  
(h) Figures for half- and full-season laves combined.  
(i) No returns received.  
(j) Effort data measured in tides not days.  
(k) Area includes Esk fishing bank, Eden haaf net and Derwent coops, although the Derwent coops (privileged fixed engines) are not fished at the present time.  
Notes: A dash is used to denote months that fall entirely within the annual close season.  
Percentage return rates for all commercial fisheries can be regarded as 100% unless otherwise specified by a footnote.

Table 10 Monthly reported migratory trout catches by commercial instruments - 1989 season.

NRA Region	River/Fishery	Fishing Method	No. Lic.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Un-known	Total Number	Total Weight (kg)	Av. day/Lic.	Catch/day
Northumbria	Coastal (N)	Drift nets	75 (a)	-	8	171	2568	3200	2344	1007	-	0	9294	23852	39.8	3.11
	Coastal (S)	T nets	75	-	23	159	5914	7321	4639	1789	-	0	19825	31188	13.3	19.83
	Coastal (S)	Drift nets	46	-	0	125	4110	6765	5341	3166	-	0	19507	42605	55.4	7.66
	Whole area	Total	121	-	29	455	12590	17286	12324	5942	-	0	48626	97445	54.0	7.44
Yorkshire	Coastal	Drift nets	23	-	0	33	916	2227	1877	954	-	0	6007	14971	51.8	5.04
	Coastal	T or J nets	37	-	0	87	2799	7576	4570	1724	-	0	16738	32416	46.3	9.77
	Whole area	Total	60	-	0	100	3715	9803	6447	2678	-	0	22743	47387	48.4	7.83
Anglian	Coastal	Various nets	159 (b)	-	-	22	138	1386	575	436	1258	0	3815	6455		
Southern	Itchen	Seine net (private)	1	0	0	4	0	0	125	-	-	0	129	267	4.0	32.25
	Hants area	Seine nets (public)	5	0	0	8	12	12	9	-	-	0	41	79		
	Whole area	Total	6	0	0	12	12	12	134	-	-	0	170	346		
Wessex	Avon + Stour	Seine nets	6	-	-	0	9	139	185	-	-	0	333	759		
	Poole Harbour	Seine net	1	-	-	0	1	20	11	0	-	0	32	98		
	Whole area	Total	7	-	-	0	10	159	196	0	-	0	365	857		
South West	Exe	Seine nets	19	0	2	0	8	11	18	4	-	0	43	63		
	Teign	Seine nets	10	-	0	30	804	625	127	21	-	0	1407	1897		
	Dart	Seine nets	18	-	3	22	254	323	153	26	-	0	781	993		
	Avon	Fixed Engine	1 (c)	-	-	-	-	-	-	-	-	-	-	-		
	Tavy	Seine nets	4 (d)	-	0	7	28	36	2	0	-	0	73	112		
	Tamar	Seine nets	14 (d)	-	1	10	76	82	32	0	-	0	201	295		
	Tavy/Tamar	Seine net	1 (e)	-	-	-	-	-	-	-	-	-	-	-		
	Lynher	Seine nets	5	-	0	4	10	12	7	0	-	0	33	54		
	Fowey	Seine nets	4	-	0	14	66	117	23	1	-	0	221	304		
	Taw/Torridge	Seine nets	14 (f)	-	-	178	293	178	34	15	-	0	698	1107		
	Lyn	Fixed Engine	1	-	-	2	51	72	8	1	-	0	134	279		
	Whole area	Total	91	0	6	267	1390	1456	404	68	-	0	3591	5104		
Welsh	Uak	Drift nets	8	0	0	12	21	17	16	18	-	0	64	262	89.9	0.12
	Uak	Putcher rank	1	0	0	3	0	13	0	0	-	0	16	33	87.0	0.18
	Uak	River total	9	0	0	8	10	14	20	8	-	0	80	134		
	Tywi	Seine nets	8	0	4	189	440	405	81	14	-	0	1113	2261	63.4	2.20
	Tywi	Coracle nets	10	0	25	170	546	368	50	9	-	0	1166	2513	55.1	2.12
	Tywi	River total	18	0	29	359	986	771	111	23	-	0	2279	4774		2.15
	Taf	Wade net	1	0	0	0	0	1	1	1	-	0	3	5	37.0	0.08
	Taf	Coracle net	1	0	14	26	38	12	0	0	-	0	90	345	37.0	2.43
	Taf	River total	2	0	14	26	38	13	1	1	-	0	93	350		1.26
	S.W.Coastal	Wade nets	13	0	0	1	27	12	22	5	-	0	67	46	5.6	0.93
	S.W.Coastal	Seine nets	7	0	0	3	70	65	8	0	-	0	146	123	8.6	2.43
	S.W.Coastal	Fishery total	20	0	0	4	97	77	30	5	-	0	213	169		1.61
	E.W.Claddau	Compass nets	6	0	0	0	0	6	1	2	-	0	9	10	23.8	0.06
	Nevern	Seine net	1	0	0	0	0	5	7	0	-	0	12	21	9.0	1.33
	Telfi	Seine nets	4	0	0	7	94	139	16	3	-	0	259	403	49.5	1.31
	Telfi	Coracle nets	8	0	0	29	129	111	30	9	-	0	308	547	44.5	0.87
	Telfi	River total	12	0	0	38	223	250	46	12	-	0	567	950		1.02
	Dyfi	Seine nets	6	0	0	20	628	996	92	3	-	0	1739	3524	44.8	6.46
	Dywynni	Seine nets	2	0	0	0	0	47	72	38	-	0	157	399	22.0	3.57
	Mawddach	Seine nets	2	0	0	0	2	20	1	0	-	0	23	53	38.5	0.30
	Glaelyn	Seine nets	2	0	0	1	45	216	17	1	-	0	280	580	50.5	2.77
	Dwylfawr	Seine nets	2	0	0	0	5	170	25	4	-	0	204	526	27.5	3.71
	S.Caern	Seine net	1	0	0	0	0	0	0	0	-	0	0	0	0	0
	Seiont	Seine nets	4	0	0	0	2	57	54	19	-	0	132	328	39.8	0.83
	N.Anglesay	Seine nets	2	0	0	0	0	7	4	3	-	0	14	23	6.5	1.08
	Ogwen	Seine nets	2	0	0	0	4	20	15	8	-	0	47	103	55.0	0.43
	Conwy	Fish Trap	1	0	0	0	0	0	0	0	-	0	0	0		
	Conwy	Seine nets	6	0	0	9	1	25	24	10	-	0	69	134	41.8	0.27
	Conwy	River Total	7	0	0	9	1	25	24	10	-	0	69	134		
	Clwyd	Drift nets	6	0	0	0	19	231	112	33	-	0	395	781	37.3	1.76
	Dee	Trammel nets	4	0	0	0	2	10	9	6	-	0	27	63	41.0	0.16
	Dee	Seine nets	24	0	0	0	5	34	20	21	-	0	80	187	57.0	0.06
	Dee	River total	28	0	0	0	7	44	29	27	-	0	107	230		0.07
	Whole area	Total	132	0	43	463	2067	2969	661	197	-	0	6400	13089	42.5	1.14
North West	Ribble	Drift nets	8	-	-	0	0	17	3	2	-	0	22	48	92.7 (g)	0.04
	Lune	Haaf nets	26	-	-	0	118	596	415	43	-	0	1172	1719	49.2	0.92
	Lune	Drift nets	10	-	-	0	7	114	52	14	-	0	187	406	54.2	0.35
	Lune	Seine net	1	-	-	0	11	86	23	0	-	0	120	168		
	Lune	River total	37	-	-	0	136	796	490	57	-	0	1479	2293		
	Kent	Lave nets	8	-	-	0	1	11	55	13	-	0	80	157	29.6	0.34
	Leven	Lave nets	6	-	-	0	0	22	23	5	-	0	50	91	19.8	0.42
	Duddon	Seine nets	3	-	-	0	0	87	112	8	-	0	187	289	17.0	3.67
	S&W Cumbria	Area Total	4 (h)	-	-	0	0	27	32	3	-	0	62	89	58.0	0.44
	Coastal	Drift nets	4	-	-	0	0	7	1	0	-	0	8	16	35.5	0.06
	Eden + Esk	Haaf nets	165	-	-	-	-	-	-	-	-	-	-	-	34.8	
	Eden + Esk	Cribs	3	-	-	-	-	-	-	-	-	-	-	-	3.7	
	Eden + Esk	River Total	168	-	0	43	1006	2235	517	48	0	0	3849	5386	34.3	0.67
	Whole area	Total	236	-	0	43	1143	3182	1233	136	0	0	5737	8389	37.6	0.65
England and Wales													91447	179052		

Key:

- (a) Northern area licences are for both drift and T nets. Not all licensees use T nets.  
(b) 95% return only.  
(c) Licence purchased by SWWA but was not used.  
(d) As part of the remedial measures taken during the 1989 drought, Tamar and Tavy netmen were paid not to fish during August.  
(e) Catches included under Tavy and Tamar as appropriate.  
(f) Taw/Torridge rehabilitation scheme - reduction of netting effort. 10 nets not operated after April, 2 others operated only April to June.  
(g) Effort data measured in tides not days.  
(h) Area includes Esk fishing bank, Ellen haaf net and Derwent coops, although the Derwent coops (privileged fixed engines) are not fished at the present time.

Notes:

A dash is used to denote months that fall entirely within the annual close season.  
Percentage return rates for all commercial fisheries can be regarded as 100% unless otherwise specified by a footnote.  
Migratory trout are not caught on the Wye, Severn or Parrett and these licences are not included.

**Table 11 Monthly reported rod catches of salmon and grilse by principal rivers - 1989 season.**

NRA Region	River	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Un-Known	Total Number	Total Weight (kg)	Catch/Lic. day
Northumbria	Aln	-	1	0	3	1	0	0	0	1	5	-	-	0	11	42	
	Coquet	-	18	11	46	30	13	29	39	27	54	-	-	35	302	1051	
	Tyne	-	48	18	61	29	81	18	72	128	287	-	-	28	744	3670	
	Wear	-	8	0	1	1	3	0	5	2	104	-	-	0	124	402	
	Tees	-	1	0	1	0	0	0	0	0	1	-	-	0	3	17	
	Total	-	74	27	112	61	77	45	116	158	451	-	-	63	1184	5182	
Yorkshire	Esk	-	-	-	0	0	0	1	0	0	10	-	-	0	11	48	0.02
Thames	Thames	-	-	-	0	0	0	4	3	1	-	-	-	0	8	29	
Southern	Test	1	1	0	3	37	101	162	84	106	8	-	-	0	503	1667	
	Itchen	0	0	2	9	28	80	82	79	78	1	-	-	0	359	1381	
	Total	1	1	2	12	65	181	244	163	184	9	-	-	0	862	3028	
Wessex	Avon	-	4	7	43	106	73	107	43	58	-	-	-	0	441	2069	
	Stour	-	0	0	3	0	0	0	0	0	-	-	-	0	3	22	
	Piddle	-	-	0	0	3	6	4	3	3	-	-	-	0	19	82	
	Frome	-	-	1	13	27	41	41	51	60	-	-	-	0	234	937	
	Total	-	4	8	59	136	120	152	97	121	-	-	-	0	697	3110	
South West	Exe	-	0	25	22	7	26	28	13	210	-	-	-	0	331	893	
	Teign	-	8	15	17	8	15	12	28	35	-	-	-	2	136	502	
	Dart	-	2	4	21	14	10	4	11	57	-	-	-	0	123	475	
	Avon	-	-	-	0	0	0	0	0	13	20	32	-	0	65	202	
	Plum	-	-	-	0	0	0	0	0	0	1	8	9	0	18	84	
	Tavy	-	-	0	0	0	0	1	2	23	12	-	-	0	38	113	
	Tamar	-	-	6	36	38	27	21	16	153	47	-	-	0	344	1103	
	Lynher	-	-	1	0	2	2	1	4	4	1	-	-	0	15	50	
	Fowey	-	-	-	0	3	2	2	3	13	28	78	22	0	149	450	
	Cornel	-	-	-	0	3	7	8	13	48	50	79	38	0	244	831	
	Taw	-	-	37	31	24	10	4	0	54	-	-	-	0	160	600	
	Torridge	-	-	4	11	2	1	0	1	10	-	-	-	0	29	101	
	Lyn	-	0	0	8	3	28	41	87	25	38	-	-	0	206	448	
	Others	-	0	0	0	0	0	1	1	1	4	2	1	0	10	26	
	Total	-	8	92	144	104	128	123	157	644	197	199	70	2	1868	5889	
Sewern-Trent	Sewern	-	17	32	167	185	112	63	30	45	-	-	-	0	651	3383	
	Trent	(a)	4	2	1	0	0	0	0	0	-	-	-	0	7	24	
	Total		4	19	33	167	185	112	63	45	-	-	-	0	658	3407	
Welsh	Wye	(b)	2	16	78	498	671	385	135	71	228	216	-	0	2300	10755	
	Usk		1	3	28	78	59	67	19	13	43	17	-	0	326	1409	
	Taff		-	-	0	1	0	0	0	2	1	-	-	0	4	11	
	Ogmore		-	-	1	0	0	0	0	3	6	0	-	1	11	34	
	Atan		-	-	0	0	0	0	0	0	0	-	-	0	0	0	
	Neath		-	-	0	3	1	1	2	0	5	0	-	0	12	26	
	Tawe		-	-	0	0	0	0	2	13	1	-	-	1	25	74	
	Loughor		-	-	0	0	1	1	0	1	3	1	-	0	7	20	
	Gwendraeth		-	-	0	0	0	0	0	0	0	-	-	0	0	0	
	Tywi		-	-	9	18	12	17	21	80	288	87	-	14	544	1785	
	Taf		-	-	2	2	3	1	4	3	5	4	-	0	24	85	
	E-W.Cleddau		-	-	1	3	2	11	4	8	24	8	-	0	61	149	
	Neurom		-	-	0	0	0	2	8	11	14	2	-	0	37	129	
	Tafli		-	-	1	26	7	6	4	9	136	133	-	9	331	1170	
	Aaron		-	-	0	1	0	1	1	0	0	1	-	0	4	10	
	Ystwyth		-	-	0	0	0	0	0	1	8	5	-	0	14	45	
	Rheidol		-	-	0	0	0	3	6	19	27	24	-	2	81	233	
	Dyfi		-	-	0	0	1	7	8	72	74	56	-	5	223	714	
	Dysynni		-	-	0	0	0	0	2	0	2	2	-	0	6	22	
	Aron		-	-	0	0	1	0	0	1	0	1	-	0	3	10	
	Mawddach		-	-	0	0	5	37	49	111	73	38	-	18	331	1115	
	Dwyrdd		-	-	0	0	0	0	0	4	6	11	-	4	25	82	
	Glaslyn		-	-	0	2	13	11	9	8	20	11	-	2	76	252	
	Dwyfawr		-	-	0	0	0	1	4	9	8	7	-	3	32	101	
	Llyfni		-	-	0	0	0	0	2	13	10	4	-	0	29	82	
	Gwyrfa		-	-	0	0	0	0	0	0	1	-	-	2	3	109	
	Seiont		-	-	0	0	0	0	0	15	10	43	-	4	72	228	
	Ogwen		-	-	0	0	0	1	5	46	47	49	-	3	151	485	
	Conwy		-	-	0	10	8	17	26	123	76	69	-	13	342	1084	
	Clwyd		-	-	1	7	18	14	13	15	12	7	-	10	97	269	
	Dee		4	4	10	35	32	25	28	38	61	30	-	8	273	1082	
	Others		0	0	1	2	1	0	0	1	0	2	-	3	10	41	
	Total		7	23	132	682	835	608	350	683	1201	831	-	102	5454	21611	
North West	Ribble		-	0	5	2	0	2	10	17	24	208	-	0	268	1026	0.07
	Wyre		-	0	0	0	0	0	0	0	6	-	-	0	6	15	0.06
	Lune		-	6	4	1	0	1	4	80	122	494	-	0	712	2631	0.10
	Kent		-	0	1	1	1	2	4	28	62	110	-	0	209	533	0.11
	Leven		-	1	0	0	0	0	1	9	19	43	-	0	73	213	0.08
	Duddon		-	0	0	0	0	0	3	1	10	13	-	0	27	76	0.14
	Esk		-	0	0	0	0	0	0	2	8	1	-	0	11	25	0.13
	Ir		-	0	0	0	0	2	6	41	28	39	-	0	116	365	0.14
	Ehen		-	0	0	0	1	5	3	44	49	85	-	0	187	544	0.09
	Derwent		-	0	0	0	0	4	8	207	300	452	-	0	971	3690	0.36
	Ellen		-	0	0	0	0	0	0	0	0	32	-	0	32	101	0.50
	Eden		0	15	40	44	41	27	34	193	338	324	-	0	1056	4054	0.11
	Esk(Border)		-	0	1	2	0	7	8	58	96	84	-	0	256	969	0.15
	Others		-	0	0	0	0	0	1	15	16	30	-	0	62	182	0.10
	Total		0	22	51	50	43	50	82	695	1072	1921	-	0	3986	14424	0.13
England and Wales															14728	56728	
Key:		(a) Fish caught on freshwater fish licences.															
		(b) Data from fishery owner's returns, not individual catch returns.															
Notes:		A dash is used to denote months that fall entirely within the annual close season.															
		'Principal rivers' include all rivers supporting commercial fisheries or with mean annual rod catches in excess of 30 salmon or 100 sea trout, plus some smaller rivers selected by RWAs. Catches from tributaries and from minor rivers with a shared estuary are included under the appropriate main river. The catch from remaining rivers in each region is aggregated and recorded under 'others'.															

Table 12 Monthly reported rod catches of migratory trout by principal rivers - 1989 season.

NRA Region	River	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Un-Known	Total Number	Total Weight (kg)	Catch/Lic. day
Northumbria	Aln	-	-	-	21	1	6	11	12	23	165	-	-	1	240	450	
	Coquet	-	-	-	21	14	15	28	36	58	188	-	-	4	364	689	
	Tyne	-	-	-	60	0	22	18	96	97	383	-	-	36	712	1283	
	Wear	-	-	-	14	2	4	16	44	70	168	-	-	6	324	535	
	Total	-	-	-	118	17	47	73	188	248	904	-	-	47	1640	2937	
Yorkshire	Esk	-	-	-	3	2	6	5	6	6	69	-	-	0	97	131	0.14
Thames	Total	-	-	-	1	2	1	0	1	0	-	-	-	0	5	7	
Southern (a)	Test	-	-	-	-	1	14	40	58	66	68	-	-	0	247	312	
	Itchen	-	-	-	-	1	4	22	59	78	5	-	-	0	169	157	
	Sussex Rivers	-	-	-	-	0	1	3	2	4	8	-	-	3	21	44	
	Total	-	-	-	-	2	19	65	119	148	81	-	-	3	437	513	
Wessex	Avon	-	-	-	3	0	16	103	95	57	67	-	-	0	341	430	
	Piddle	-	-	-	0	0	1	1	3	2	4	-	-	0	11	22	
	Frome	-	-	-	1	0	1	1	10	15	10	-	-	0	38	64	
	Others	-	-	-	0	6	3	2	0	1	0	-	-	0	12	14	
	Total	-	-	-	4	6	21	107	108	75	81	-	-	0	402	530	
South West	Axe	-	-	-	2	24	6	16	19	12	11	-	-	0	90	44	
	Ouse	-	-	-	0	1	2	4	13	12	0	-	-	0	32	24	
	Eze	-	-	-	0	0	0	0	6	0	3	-	-	0	9	5	
	Teign	-	-	-	2	7	32	93	142	92	170	-	-	0	565	442	
	Dart	-	-	-	0	17	100	109	78	95	107	-	-	0	504	513	
	Avon	-	-	-	0	3	32	105	53	62	-	-	-	0	255	176	
	Erme	-	-	-	0	0	0	0	6	13	3	-	-	1	23	18	
	Yealm	-	-	-	0	0	0	1	21	12	9	-	-	0	43	35	
	Plum	-	-	-	2	5	7	28	57	26	19	-	-	2	144	107	
	Tavy	-	-	-	2	2	10	20	76	41	63	-	-	0	214	133	
	Tamar	-	-	-	1	1	2	26	158	22	64	-	-	2	278	134	
	Lynher	-	-	-	1	5	20	50	72	47	18	-	-	0	213	163	
	Loe	-	-	-	0	5	15	42	34	7	-	-	-	0	103	54	
	Fowey	-	-	-	3	12	67	187	126	77	-	-	-	0	472	268	
	Camel	-	-	-	0	31	87	109	84	58	-	-	-	2	369	238	
	Tew	-	-	-	1	21	31	43	25	31	52	-	-	0	204	233	
	Torridge	-	-	-	0	0	11	13	6	7	7	-	-	0	44	45	
	Lyn	-	-	-	0	0	0	17	27	19	8	-	-	1	72	81	
	Others	-	-	-	0	5	0	0	3	3	1	-	-	1	13	8	
	Total	-	-	-	9	68	289	607	1138	737	750	-	-	9	3645	2717	
Welsh	Wye	-	-	-	0	1	1	1	2	1	4	-	-	1	12	28	
	Usk	-	-	-	2	6	15	10	6	15	34	-	-	2	95	96	
	Taff	-	-	-	1	1	0	3	2	7	7	-	-	0	22	18	
	Ogmore	-	-	-	1	8	11	8	50	64	64	-	-	2	221	295	
	Alan	-	-	-	0	0	3	3	3	10	4	-	-	9	32	27	
	Neath	-	-	-	3	9	23	9	9	22	13	-	-	0	91	194	
	Tawe	-	-	-	1	7	18	38	60	84	84	-	-	5	317	390	
	Loughor	-	-	-	0	1	8	9	11	24	18	-	-	2	87	146	
	Gwendraeth	-	-	-	1	4	5	19	27	20	12	-	-	5	93	58	
	Tywi	-	-	-	13	109	398	791	744	772	654	-	-	210	3907	5700	
	Taf	-	-	-	0	3	6	31	14	17	8	-	-	0	98	98	
	E+W.Cledau	-	-	-	0	5	10	115	119	75	94	-	-	5	446	302	
	Neurom	-	-	-	0	0	10	34	111	112	102	-	-	0	390	245	
	Telli	-	-	-	5	9	41	179	315	261	242	-	-	66	1236	941	
	Aaron	-	-	-	1	0	2	34	39	35	48	-	-	31	204	117	
	Ystwyth	-	-	-	0	0	0	13	10	19	42	-	-	4	96	91	
	Rheidol	-	-	-	0	2	5	42	63	113	135	-	-	5	410	396	
	Dyfi	-	-	-	0	4	32	148	259	315	175	-	-	51	1074	1273	
	Dysynni	-	-	-	4	14	8	37	58	55	50	-	-	0	242	192	
	Mawddach	-	-	-	1	12	29	203	218	263	268	-	-	169	1205	1275	
	Arro	-	-	-	0	0	4	26	48	43	15	-	-	0	140	97	
	Owryd	-	-	-	0	1	0	6	32	53	68	-	-	42	213	150	
	Glaslyn	-	-	-	0	63	84	74	57	80	38	-	-	12	408	303	
	Dwylawr	-	-	-	0	0	6	67	90	272	133	-	-	103	696	569	
	Llyfni	-	-	-	1	0	0	6	31	17	30	-	-	21	131	78	
	Gwryfai	-	-	-	0	0	0	0	1	4	3	-	-	0	9	7	
	Seiont	-	-	-	0	1	0	12	20	26	43	-	-	9	127	91	
	Ogwen	-	-	-	0	0	1	7	6	16	11	-	-	3	49	53	
	Conwy	-	-	-	1	0	0	6	38	77	49	-	-	39	224	267	
	Chryd	-	-	-	0	4	22	61	115	189	147	-	-	13	596	454	
	Dee	-	-	-	1	0	4	6	10	23	19	-	-	3	76	65	
	Others	-	-	-	0	10	13	26	34	30	23	-	-	97	256	163	
	Total	-	-	-	36	274	739	2026	2600	3114	2635	-	-	909	13203	14179	
North West	Ribble	-	-	-	-	7	42	114	130	60	27	-	-	0	380	375	0.10
	Wyre	-	-	-	-	0	0	1	1	1	1	-	-	0	4	5	0.04
	Lune	-	-	-	-	25	127	239	327	420	190	-	-	0	1328	1251	0.19
	Kent	-	-	-	-	2	8	23	54	134	24	-	-	0	245	214	0.13
	Leven	-	-	-	-	0	9	10	51	34	5	-	-	0	109	90	0.12
	Duddon	-	-	-	-	0	4	3	14	4	11	-	-	0	36	47	0.19
	Esk	-	-	-	-	0	0	7	8	0	6	-	-	0	21	30	0.25
	In	-	-	-	-	0	0	12	22	19	10	-	-	0	63	70	0.07
	Ehen	-	-	-	-	0	4	27	35	33	5	-	-	0	104	100	0.06
	Derwent	-	-	-	-	2	27	53	22	44	9	-	-	0	157	159	0.06
	Ellen	-	-	-	-	0	0	0	1	7	3	-	-	0	11	11	0.17
	Eden	-	-	-	-	68	134	119	133	152	86	-	-	0	692	688	0.07
	Esk(Border)	-	-	-	-	22	51	37	135	24	23	-	-	0	292	231	0.18
	Others	-	-	-	-	0	1	6	20	7	5	-	-	0	39	43	0.07
	Total	-	-	-	-	126	407	651	953	939	405	-	-	0	3481	3294	0.11
England and Wales															22910	24308	
<p>Key: (a) Migratory trout catch return rates are very variable. Data are unreliable.</p> <p>Notes: A dash is used to denote months that fall entirely within the annual close season.</p> <p>*Principal rivers include all rivers supporting commercial fisheries or with mean annual rod catches in excess of 30 salmon or 100 sea trout, plus some smaller rivers selected by RWAs. Catches from tributaries and from minor rivers with a shared estuary are included under the appropriate main river. The catch from remaining rivers in each region is aggregated and recorded under 'others'.</p>																	



**Table 13 Estimated proportions of salmon and grilse in commercial and rod catches by region - 1989 season.**

NRA Region	Commercial Catch					Rod Catch				
	No. Grilse	% by No. (% by wt)	No. Salmon	% by No. (% by wt)	Total	No. Grilse	% by No. (% by wt)	No. Salmon	% by No. (% by wt)	Total
Northumbria (a)	23848	68 (49)	11321	32 (51)	35169	615	52 (33)	569	48 (67)	1184
Yorkshire (a,b)	5059	81 (65)	1225	19 (35)	6284	7	64 (44)	4	36 (56)	11
Southern (c)										
Wessex (a)	302	51 (34)	291	49 (66)	593	273	39 (24)	424	61 (76)	697
South West (c)										
Severn-Trent (d)	2213	51 (35)	2151	49 (65)	4364	59	9 (5)	592	91 (95)	651
Welsh (a)	3392	67 (48)	1666	33 (52)	5058	3302	61 (41)	2152	39 (59)	5454
North West (b,a)	6446	88 (79)	848	12 (21)	7294	3548	89 (80)	438	11 (20)	3986

Key: Full details of the methods of calculating age composition were given in the 1987 catch statistics report (Russell, I.C. and Buckley, A., 1989.)  
(a) Catch data stratified. Age composition estimated from age/weight key.  
(b) Catch data not stratified. Age composition derived from the mean weights of salmon and grilse in scale samples.  
(c) Insufficient scale sampling undertaken in these regions to enable estimation of relative proportions of salmon and grilse.  
(d) Data provided by NRA Severn-Trent region and relate to R. Severn only.

**Table 14 Catches of eels and freshwater fish taken in inland waters for human consumption - 1989 season. (As compiled for EIFAC).**

NRA Region	Nominal commercial catch (tonnes) (a)					Nominal rod catch (tonnes) (b)						
	Eel	Elvers	Char	Shad	Pike	Brown Trout	Rainbow Trout	Eel	Shad	Pike	Grayling	Zander
Northumbria	-	-	-	-	-	12.00	43.00	-	-	-	-	-
Yorkshire	1.84	-	-	-	-	-	-	-	-	-	-	-
Anglian	10.00	-	-	-	1.00	20.00	100.00	-	-	-	-	-
Thames	3.69	-	-	-	-	1.63	28.30	-	-	-	-	-
Southern	30.00	-	-	-	-	45.36	226.80	-	-	-	2.27	-
Wessex	22.68	-	-	-	-	-	-	-	-	-	-	-
South West	3.53	-	-	-	-	-	-	-	-	-	-	-
Severn-Trent	8.00	20.00	-	1.00	-	40.00	200.00	2.00	0.10	0.10	-	0.10
Welsh	0.24	0.54	-	-	-	-	-	-	-	-	-	-
North West	0.65	0.03	2.27	-	-	-	-	-	-	-	-	-
Total	80.63	20.57	2.27	1.00	1.00	118.99	598.10	2.00	0.10	0.10	2.27	0.10

Key: (a) The eel catch data are based on incomplete returns received by 5 NRA Regions (Yorkshire, Thames, South West, Welsh, and North West) and estimates for the other areas. Commercial catches of all other species have been estimated.  
(b) Nominal rod catches have been derived from estimates or catch returns, which in some cases may be incomplete. The regional data for brown and rainbow trout include statistics from put-and-take fisheries which will be more accurate.

Notes: The absence of data in any category is not indicative of a zero catch.  
The above data are collated annually for inclusion in the European Inland Fisheries Advisory Commission National report of member countries (EIFAC, in press) and represent the best available data for England and Wales. However it is stressed that there are few statutory requirements for the collection of catch data for these species and extreme caution should be exercised in their use.

**Table 15 Nominal catches of salmon in high-seas interception fisheries (tonnes round fresh weight), 1979-1989.**

Year	Northern Norwegian Sea long-line fishery (north of Lat 67 deg N)	Faroeese Area long-line fishery		West Greenland drift net fishery	
	Catch (a)	Catch (b)	Quota	Catch	Quota
1979	118	181		1395	1190
1980	156	703		1184	1190
1981	213	1125	(725) (c)	1264	1265
1982	622	680	(625) (c)	1077	1253
1983	404	740	(625) (c)	310	1190
1984	29	700	(625) (c)	297	870
1985	0	568	(550) (c)	864 (d)	852
1986	0	530	(550) (c)	960 (d)	908
1987	0	576	597 (e)	966	935
1988	0	243	597 (e)	893	840 (g)
1989	0	364 (f)	597 (e)	337 (f)	840 (g)

Key:

(a) Catches in the N. Norwegian Sea fishery were made predominantly by Danish vessels, however Faroese vessels contributed substantially (259 tonnes) to the catch in 1982.

(b) Catches in the Faroes fishery are made by Faroese vessels, however a relatively small contribution was also made by Danish vessels in the period 1978-84. A small part of the catch in 1981 was made in the N. Norwegian Sea.

(c) Quota applies to fishing season (autumn-spring) beginning in the year stated. Catch is for calendar year.

(d) An additional 6-19 tonnes were also caught on the E. Greenland coast.

(e) NASCO quota is for a maximum total catch of 1790 tonnes for the period 1987-89. Catch in any year not to exceed 626.5 tonnes.

(f) Provisional figures.

(g) NASCO quota is for a maximum total catch of 2,520 tonnes for the period 1988-90 with annual opening date of 1 August. Catch in any year not to exceed 924 tonnes + adjustment for later opening date.

Note: All data converted from gutted weights using appropriate factors.

Acknowledgement: The data presented in this table were extracted from reports of the ICES Working Group on North Atlantic Salmon (see for example, Anon., 1990), and are cited by kind permission of ICES.

**Table 16 Nominal catches of salmon and grilse in home-water fisheries (tonnes round fresh weight), 1979-1989.**

Year	France	Scotland	Ireland (a)	Northern Ireland (a,b)	Norway	Sweden (West coast)	Finland	USSR	Iceland	Canada (c)	USA	England and Wales (d)	Total
1979	10	1075	1087	99	1831	12	28	455	225	1287	2.5	261	6381
1980	30	1134	947	122	1830	17	34	664	249	2680	5.5	360	8073
1981	20	1233	685	101	1656	28	44	463	163	2437	6.0	483	7327
1982	20	1092	993	132	1348	25	54	364	147	1798	6.4	286	6265
1983	16	1221	1656	187	1550	28	57	507	188	1424	1.3	429	7274
1984	25	1013	829	78	1623	40	44	593	159	1112	2.2	345	5863
1985	22	813	1595	98	1561	45	49	658	217	1133	2.1	381	6655
1986	28	1271	1730	109	1598	54	38	608	310	1559	1.9	430	7737
1987	27	822	1239	56	1385	47	49	564	222	1784	1.2	302	6588
1988	32	882	1874	114	1076	40	34	419	396	1311	0.9	395	6573
1989(e)	14	780	1079	142	881	29	52	359	275	1166	1.7	296	5075

Key:

(a) Catch on River Foyle allocated 50% Ireland and 50% N. Ireland.

(b) Not including angling catch (mainly grilse).

(c) Includes estimates of local sales and by-catch.

(d) Figures for England and Wales for 1978-82 must be considered as provisional pending the publication by MAFF of validated historic catch data.

(e) Provisional figures, with the exception of those for England & Wales.

Acknowledgement: The data presented in this table were extracted from the 1990 report of the ICES Working Group on North Atlantic Salmon (Anon., 1990), and are cited by kind permission of ICES.

ERRATUM: USSR CATCH DATA HAVE RECENTLY BEEN AMENDED. DATA INCLUDED IN EARLIER REPORTS WERE INCORRECT.

**Table 17 Summary of regional salmon and grilse commercial catches, 1984-89.**

NRA Region	Numbers of fish							% Change	
	1984	1985	1986	1987	1988	5-Year Mean (1984-88)	1989	'89 on '88	'89 on 5-yr mean
Northumbria	50685	46652	53898	33064	44679	45796	35169	-21	-23
Yorkshire	8610	10704	9527	3079	6170	7618	6284	+2	-18
Southern	157	251	461	505	477	370	83	-83	-78
Wessex	1034	629	1046	702	736	829	593	-19	-29
South West	7455	9247	10502	13828	11063	10419	10091	-9	-3
Severn-Trent	3376	2423	3300	2963	3511	3115	4364	+24	+40
Welsh	3947	3465	5031	4535	5010	4398	5058	+1	+15
North West	7957	2559	6682	5052	5671	5584	7294	+29	+31
Total	83221	75930	90447	63728	77317	78129	68936	-11	-12

**Table 18 Summary of regional migratory trout commercial catches, 1984-89.**

NRA Region	Numbers of fish							% Change	
	1984	1985	1986	1987	1988	5-Year Mean (1984-88)	1989	'89 on '88	'89 on 5-yr mean
Northumbria	43541	29619	24610	30345	32711	32165	48626	+49	+51
Yorkshire	20535	21160	23107	18994	21574	21074	22743	+5	+8
Southern	156	496	163	327	232	275	170	-27	-38
Wessex	527	384	359	410	505	437	365	-28	-16
South West	9261	4907	3482	8570	4364	6117	3591	-18	-41
Welsh	10937	5097	5098	4878	6542	6510	6400	-2	-2
North West	10742	6467	5633	6032	7207	7216	5737	-20	-20
Total	95699	68130	62452	69556	73135	73794	87632	+20	+19

**Table 19 Summary of regional salmon and grilse rod catches, 1984-89.**

NRA Region	Numbers of fish							% Change	
	1984	1985	1986	1987	1988	5-Year Mean (1984-88)	1989	'89 on '88	'89 on 5-yr mean
Northumbria	572	1100	1116	2269	2152	1442	1184	-45	-18
Yorkshire	39	104	65	70	49	65	11	-78	-83
Thames	6	11	9	5	12	9	8	-33	-11
Southern	960	905	1191	840	1052	990	862	-18	-13
Wessex	1045	916	1452	924	1146	1097	697	-39	-36
South West	1652	3173	3763	2691	4579	3172	1868	-59	-41
Severn-Trent	545	1256	1254	929	1362	1069	658	-52	-38
Welsh	3802	8876	8498	8202	15989	9073	5454	-66	-40
North West	2400	3260	2999	3781	6505	3789	3986	-39	+5
Total	11021	19601	20347	19711	32846	20705	14728	-55	-29

**Table 20 Summary of regional migratory trout rod catches, 1984-89.**

NRA Region	Numbers of fish							% Change	
	1984	1985	1986	1987	1988	5-Year Mean (1984-88)	1989	'89 on '88	'89 on 5-yr mean
Northumbria	1010	675	1256	2237	2778	1591	1640	-41	+3
Yorkshire	256	209	130	299	279	235	97	-65	-59
Thames	-	4	2	4	0	3	5	-	-
Southern (a)	156	124	2517	56	1073	785	437	-59	-44
Wessex	1265	1668	2274	1447	837	1498	402	-52	-73
South West	5041	4838	5656	10898	7755	6838	3645	-53	-47
Welsh	18386	20868	21308	35727	30681	25394	13203	-57	-48
North West	4446	3993	3739	5195	6215	4718	3481	-44	-26
Total	30560	32379	36882	55863	49618	41060	22910	-54	-44
<p>Key: (a) Migratory trout returns are unreliable in the NRA Southern region. In addition data for 1986 and 1988 are believed to include significant numbers of under-sized fish which were returned to the water.</p>									

Table 21 Salmon stocking - numbers of eggs, fry, parr and smolts released - 1989 season.

NRA Region	River	Tributary	Ova	Unfed Fry	Fed Fry	0+ Parr	1+ Parr	Smolts
Northumbria	Ain		40000	-	-	-	-	-
	Coquet		-	-	-	30000	30000	-
	Tyne	Main R.	-	-	-	30000	-	-
		S.Tyne	-	-	-	-	30000	-
		Rede	-	-	-	30000	50000	-
		N.Tyne	-	-	-	-	50000	-
	Wear		-	-	-	30000	30000	-
	Tees		25000	-	-	-	-	-
	Total		65000	-	-	120000	190000	-
	Value (£)		650	-	-	18000	47500	-
Yorkshire	Esk		-	-	-	-	12000	-
	Value (£)		-	-	-	-	1500	-
Thames	Thames	Main R.	-	-	-	-	-	53521
		Wey (sth)	-	-	-	-	19247	-
		Wey (nsh)	-	-	-	-	4632	-
		Pang	-	-	-	-	7558	-
		Loddon	-	-	-	-	15832	-
		Lyde	-	-	-	-	4530	-
		Chess	-	-	-	-	4158	-
		Kennet	-	-	-	-	63812	-
		Lambourne	-	-	-	-	15319	-
		Enborne	-	-	-	-	21523	-
	Total		-	-	-	-	156611	53521
	Value (£)		-	-	-	-	31300	64200
Southern	Test		-	-	-	-	-	17000 (a)
	Itchen		-	-	-	-	-	700
	Total		-	-	-	-	-	17700
	Value (£)		-	-	-	-	-	5000
South West	Tamar	Lyn	-	-	-	-	-	15000
	Value (£)		-	-	-	-	-	4500
Severn-Trent	Severn	Camlad	-	-	5000	-	-	-
	Value (£)		-	-	600	-	-	-
Welsh	Wye	Upper Wye	-	96450	-	-	-	-
		Bach Howey	-	16736	-	-	-	-
		Scithwen	-	11839	-	-	-	-
		Garth Dulais	-	9456	-	-	-	-
		R. Dulais	-	9852	-	-	-	-
		Lugg & Arrow	-	86810	-	-	-	-
	Ust	Main R.	-	-	-	-	7650	10000
		Nant Sere	-	-	8000	-	-	-
		Rhenn-goff	-	10000	-	-	-	-
		Owm Onneu	-	5000	-	-	-	-
		Glaistyr	-	5000	-	-	-	-
		Cynrig	-	8000	-	-	-	-
	Rhymney		-	-	-	-	-	3000
	Taff		-	-	5000	-	-	-
	Atan		-	-	-	-	-	6500
	Tawe		-	28500	-	-	-	-
	Cefn		-	-	-	-	5000	-
	G. Fawr		-	-	-	-	-	4000
	Loughor		-	-	-	-	-	2500
		Main R.	-	-	-	-	-	500
		Marlais	-	-	-	-	-	500
		Lash	-	-	-	-	-	2000
		Aman	-	-	-	-	-	-
	Tywi	Main R.	-	-	-	-	4250	-
		Nantgurny Fach	-	-	-	-	-	1000
		Sannan	-	-	-	-	-	2500
		Gwydderig	-	-	-	-	1000	-
		Traeglan	-	-	-	-	1000	-
		Llandovery Bran	-	-	-	-	3000	-
		Bergoed	-	-	-	-	700	-
	E. Cleddau	Syfrmyr	-	-	-	-	-	4130
	Ystwyth	Adail	-	25000	-	-	-	-
		Mad	-	25000	-	-	-	-
		Atan	-	15000	-	-	-	-
		Tynghaig	-	8000	-	-	-	-
		Birchgrove	-	7000	-	-	-	-
	Rheidol	Melindwr	-	30000	-	-	-	-
		Castell	-	20000	-	-	-	-
	Mawddach	Main R.	-	-	-	1125	3440	-
		Whin	-	-	-	-	5956	7225
		Eden	-	-	-	-	1691	7770
		Ty Gwyn	-	-	-	-	-	1000
		Cefnwg	-	-	-	1500	-	-
		Melau	-	-	-	1500	-	-
	Selont		-	27000	-	-	-	-
	Total		-	443643	13000	4125	33687	52625
	Value (£)		-	8301	2850	1134	18566	76350
North West	Ribble	Main R.	-	-	121000	20485	-	-
		Hodder	-	-	103000	20735	-	-
	Wyre		-	-	16000	-	-	-
	Lune	Main R.	84340	332000	422449	-	-	-
		Hindburn	-	-	2000	-	-	-
		Werning	-	-	90000	-	-	-
		Greta	-	-	69700	-	-	-
	Leven	Cotton Beck	-	-	-	10000	-	-
	Crake	Coniston	-	-	-	-	177883	-
	Ehen		-	-	84000	-	-	-
	Derwent		-	-	274000	-	-	-
	Eden		-	-	155000	-	-	-
		Inning	-	-	114000	-	-	-
		Earmont	-	-	22000	-	-	-
	Total		84340	332000	1473149	51220	177883	-
	Value (£)		3244	17068	94355	5755	104780	-
England and Wales			149340	775643	1491149	175345	570181	138846
Key:			(a) Private stocking, numbers estimated.					
Notes:			Values specified are estimated figures.					
			1+ Parr are those stocked out on or after 1st January in the year after they hatched.					

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